



The Digital Astronaut Project (DAP)

Applying computational models and
simulations to inform life science research

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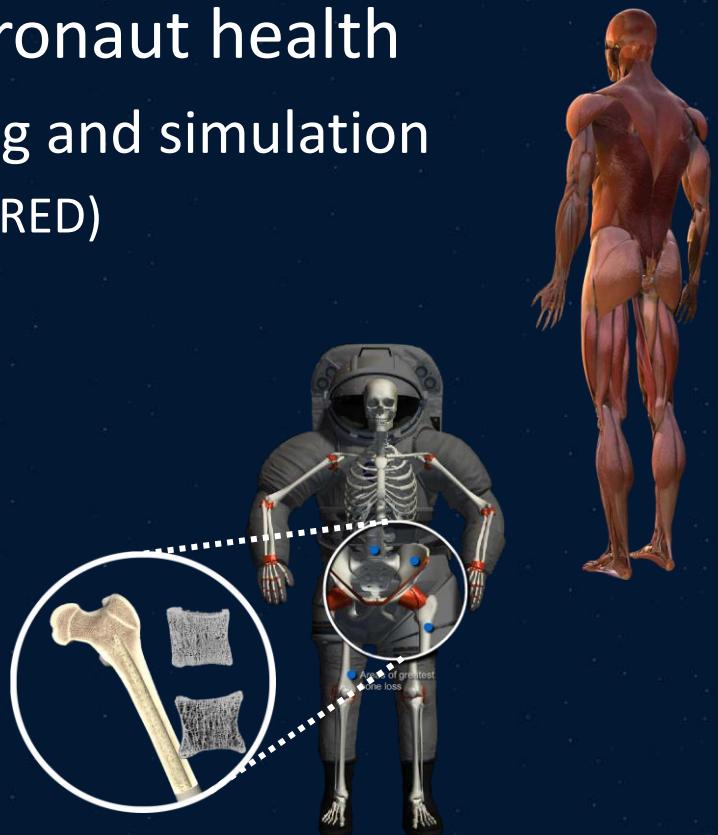
And

DeVon Griffin



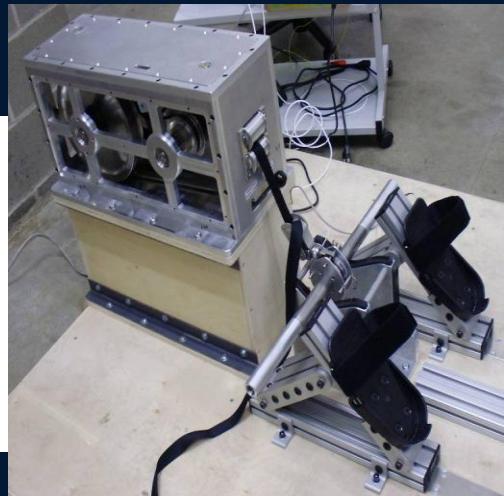
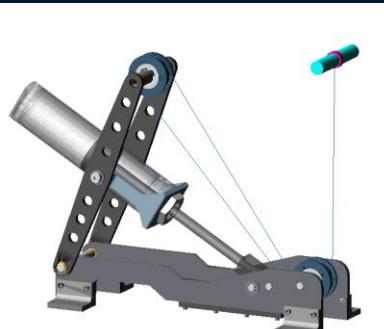
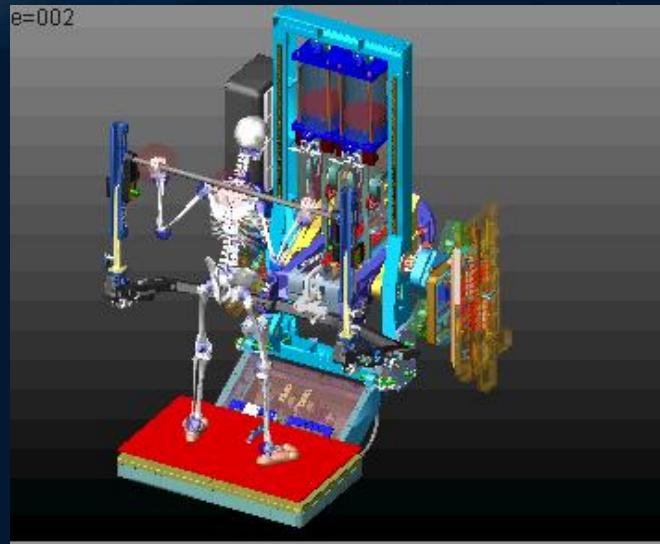
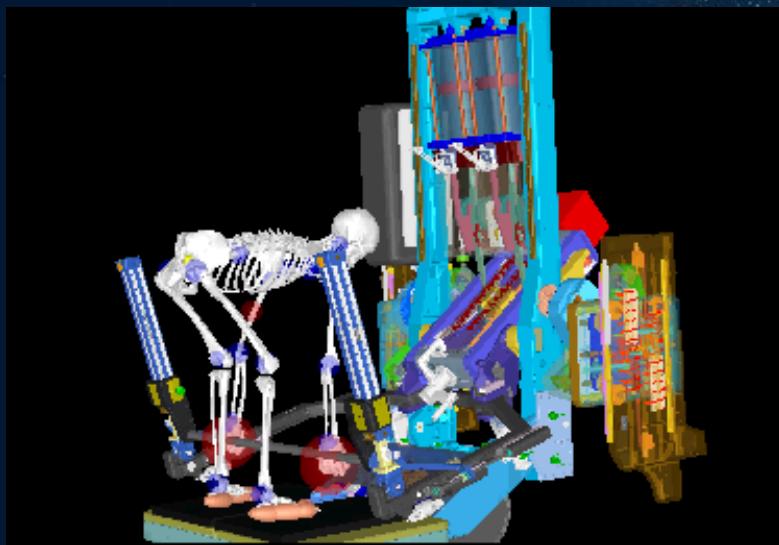
Introduction

- Advanced computational simulation environments can beneficially augment research to predict, assess and mitigate potential hazards to astronaut health
 - Exercise countermeasures modeling and simulation
 - Advanced Resistive Exercise Device (ARED)
 - Biomechanics of exercise
 - Bone adaptation
 - Muscle adaptation
 - Advanced Exercise Concept Devices





Integrated ARED





How Models Can be Applied to Enhance Life Science Research

